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09/24/2003

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EXAMINER

BALASUBRAMANIAN, VENKATARAMAN

ART UNIT

PAPER NUMBER

1624

DATE MAILED: 09/24/2003

11

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/039,706

Applicant(s)

GUTMANN, STEPHAN

Examiner

Venkataraman Balasubramanian

Art Unit

1624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Applicants' response, which included cancellation of 1-12 and addition of new claims 13-20, filed on 6/27/2003, is made of record.

Claims 13-20 are now pending.

In view of applicants' response, particularly cancellation of claims 1-12, the 112 second paragraph rejection made in the previous office action has been rendered moot.

However, the following rejections apply to the newly added claims.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 13-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

1. Claim 13 recites "wherein the compound is in free form or salt form and the tautomers thereof each in free form or salt form" which renders the claim indefinite, as it is not clear whether a mixture of compound and its tautomers were being claimed. Note the Markush recitation of tautomers should be in alternate form. In addition, the claim depicts a formula I which is not consistent with the above recited claim language as salt is not shown in the formula. An appropriate correction is needed.
2. The same rejection also applies to claim 18-20 which all recite the same claim language.

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Claims 14-17 are included in this rejection as they all depend on claim 13 and therefore have the same embodiment.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 13-16, and 18-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Kristinsson US 4,931,439.

Kristinsson teaches 2,3,4,5-tetrahydro-3-oxo-4-[(pyridin-3yl)-methyleneamino]-6-methyl-1,2,4-triazines which include the same compound –pymetrozone-, (as noted in the instant specification and cited in the Information Disclosure Statement) for the use as pesticides. See col.1, formula I and note the definition of various variable groups. See col. 2-4 for preferred embodiments and process of making them. See examples of compounds made on col. 7-12. Especially see Example P.5 wherein Kristinsson teaches the process for making pymetrozone. Note use of 2N hydrochloric acid, which would obviously have water.

Instant specification on page 8 clearly admits that water-free and solvent-free pymetrozone take up water or a solvent from atmosphere or during mixing or grinding. This property of pymetrozone as noted by the applicants appears to be inherent property of the compound. Hence there is no reason to believe that the prior art

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pymetrozone, which was in contact with water, would not do so and form hydrate with water used.

Applicants have not shown that the prior art compound is devoid of hydrate. Hence this rejection is proper. See *In re Best* 195 USPQ 430. Note the following quote taken from *In re Best* 195 USPQ 430 : “ Where the patent Office has reason to believe that a functional limitation asserted to be critical for establishing novelty in the claimed subject matter, may, in fact, be an inherent characteristic in the prior art, it possesses the authority to require the applicant to prove that the subject matter shown to be in the prior art does not possess the characteristic relied on”. See also *In re Fitzgerald* 205 USPQ 594; *In re Grose* 201 USPQ 57. See also 51 USPQ 2d 1301, *Abbott Laboratories vs Geneva Pharmaceuticals* regarding the crystalline form of a product.

Kristinsson also teaches that the said compound can be used in formulation with suitable solvents, which include water. See col. 5, lines 25- 45, especially line 45. Since the formulation as such is a solution, there is no distinction between using a hydrate or free form of the compound. Hence rejection of claim 14 is proper.

There is no reason to believe that the instant formulation would behave differently from those of Kristinsson. Hence this rejection is applicable to use of the compound pymetrozone in formulation. Note *In re Petering et al* 133 USPQ 275; *In Re Schaumann*, 195 USPQ 5.

This rejection is same as made in the previous office action except that examiner has corrected the error in pointing out compound P.3 instead of the correct compound P.5. As for the traversal it is clear that reference compound is in contact with water and

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hence inherently form hydrate. It is applicants' burden to show that the prior art compound is not hydrate and that it does not have two molecules of water of hydration.

Claims 13-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Rapold et al. US 5,384,403.

Rapold et al teaches a process for making pymetrozone, wherein water is used as solvent. See example 11 on column 8.

Instant specification on page 8 clearly admits that water-free and solvent-free pymetrozone take up water or a solvent from atmosphere or during mixing or grinding. This property of pymetrozone as noted by the applicants appears to be inherent property of the compound. Hence there is no reason to believe that the prior art pymetrozone, which was in contact with water, would not do so and form hydrate with water used.

Applicants have not shown that the prior art compound is devoid of hydrate. Hence this rejection is proper. See In re Best 195 USPQ 430. Note the following quote taken from In re Best 195 USPQ 430 : " Where the patent Office has reason to believe that a functional limitation asserted to be critical for establishing novelty in the claimed subject matter, may, in fact, be an inherent characteristic in the prior art, it possesses the authority to require the applicant to prove that the subject matter shown to be in the prior art does not possess the characteristic relied on". See In re Fitzgerald 205 USPQ 594; In re Grose 201 USPQ 57. See also 51 USPQ 2d 1301, Abbott Laboratories vs Geneva Pharmaceuticals regarding the crystalline form of a product.

Note In re Petering et al 133 USPQ 275; In Re Schaumann, 195 USPQ 5.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 17 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kristinsson US 4,931,439.

Teachings of Kristinsson as discussed in the above 102 rejection is incorporated herein.

Instant claims differ from teachings of Kristinsson in requiring dissolving the compound in water and removing part of the water.

Kristinsson teaches use of water as a solvent for the said pesticide formulation and hence one trained in the art would if desired would dissolve all the ingredients together and remove excess solvent, in this case water, to obtain a concentrated solution. Thus it would be obvious for one trained in the art at the time of the invention, to select all the pesticide formulation parameters in the range taught by the reference including solvents recited therein for optimizing the formulation leading a product with desirable physicochemical characteristics. Furthermore, note the court held, 'generally, differences in concentration or temperature will not support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such concentration or temperature is critical. "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges

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by routine experimentation." In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

As for applicants' traversal citing unexpected/superior properties, the comparison is not proper. Applicants have not shown that product of Kristinsson or Rapold et al., which were made in water, would not have such a unexpected/superior properties.

Conclusion

Any inquiry concerning this communication from the examiner should be addressed to Venkataraman Balasubramanian (Bala) whose telephone number is (703) 305-1674. The examiner can normally be reached on Monday through Thursday from 8.00 AM to 6.00 PM. The Supervisory Patent Examiner (SPE) of the art unit 1624 is Mukund Shah whose telephone number is (703) 308-4716.

The fax phone number for the organization where this application or proceeding is assigned (703) 308-4556.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1235.

V. Balasubramanian
Venkataraman Balasubramanian

9/17/2003